

[BUTTON STRUCTURE AND DESIGN METHOD FOR LATCHING PREVENTION]

Abstract

A latch-free button structure and its design method that can be applied to most electronic devices. The button includes a body, a wing plate, a positioning plate and a contact rod. The top end of the wing plate joins with the side edges of the button body and the positioning plate joins with the lower end of the wing plate. The contact rod is attached to the bottom section of the button body. If the height from the bottom of the contact rod to the contact point on the circuit board is B; the height from the bottom section of the button body to the surface of the housing is C; the height of the wing plate is A; the height of the sidewall of the button cover close to the button body is D and the height from the uppermost section of the button body to the top end of the wing plate is E, the value of A, B, C, D and E must follow the inequality relationships $E-B>D$, $E-D>A$, and $D>A\geq C\geq B$.